Syllabus.

HILDRETH *v.* MASTORAS.

CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE NINTH CIRCUIT.

No. 51. Argued October 21, 1921.—Decided November 7, 1921.

1. The presumption of priority and novelty which arises from the granting of a patent has greatly increased weight when the claim of the inventor was subjected to close and careful scrutiny in the Patent Office under the stimulus of a heated contest. P. 32.
2. It is not necessary, in order to sustain a generic patent, to show that the device is a commercial success. The machine patented may be imperfect in operation, but if it embodies the generic principle, and works,—that is, if it actually and mechanically performs, though only in a crude way, the important function by which it makes the substantial change claimed for it in the art, it is enough. P. 34.
3. A patentee who took the important but long-delayed and therefore not obvious step from the pulling of candy by hand to the performance of the same function by machine, the ultimate effect of which, with the mechanical and patentable improvements of his device, was greatly to reduce its cost, and to enlarge the field of the art, was a pioneer. P. 34.
4. The Dickinson patent, No. 831,501, claim 1, for a candy-pulling machine comprising a plurality of oppositely-disposed candy hooks or supports, a candy-puller (consisting of a third pin or support), and means for producing a specified relative in-and-out motion of these parts for the purpose of alternately pulling and overlapping the candy, *held*: (a) Not anticipated by the earlier Firchau patent, comprising two hooks or pins attached to oppositely rotating discs and passing each other in concentric circles. P. 32. (b) Infringed by the later, Langer patent which, instead of having one stationary pin and two others which move relatively to it and to each other, as in the Dickinson construction, has two stationary pins and a third which moves relatively to both of them, the path of the candy under the operation of the pins being in both cases along a course corresponding in form to a figure 8. P. 35.
5. The Dickinson patent, *supra*, provided a trough to support the candy against gravity, but specified that any other support suitable to support it while being operated might be used. *Held*, that the trough was not an essential element and that an arrangement of the pins in a horizontal instead of a vertical position, so that the

candy was supported by them, was at most an improved equivalent. P. 36.

6. A generic patent is entitled to broad equivalents. P. 36.

263 Fed. 571, reversed.

CERTIORARI to review a judgment of the Circuit Court of Appeals in a suit brought by the present petitioner to enjoin an infringement of his patent. The District Court granted the injunction, 253 Fed. 68; but it was reversed by the court below, 263 Fed. 571.

Mr. George P. Dike, with whom *Mr. Frederic D. McKenney* was on the briefs, for petitioner.

Mr. Joseph L. Atkins, for respondent, submitted. *Mr. W. A. Robbins* was also on the briefs.

MR. CHIEF JUSTICE TAFT delivered the opinion of the court.

This is a certiorari to the Circuit Court of Appeals for the Ninth Circuit bringing here for review a decree of that court, reversing one of the District Court of Oregon granting an injunction against infringement of a patent for a candy pulling machine. The patent, No. 831,501, was issued to Hildreth as assignee by mesne assignments of Dickinson. Mastoras, the defendant in the District Court, made and used a candy pulling machine, under a later patent of Langer. The Circuit Court of Appeals held the claim of the Dickinson patent sued on to be so limited as not to cover the Langer device. 253 Fed. 68; 263 Fed. 571.

The chief question in this case is infringement, and that turns on the question whether Dickinson's invention is held to be a primary or generic invention, or a narrow one limited solely to the device shown.

Not all candy is pulled, but much of it is. The process is first the mixture of the ingredients, then the boiling,

then the cooling on a slab, and then the pulling. After boiling and cooling, it is a compact mass of dark color. The pulling aerates it and makes it less in weight but larger in bulk, lighter in color and more capable of holding flavor. Until the beginning of this century, candy was pulled only by hand. It required much strength. Candy pullers were hard to get. The work was strenuous and produced perspiration and uncleanliness. It was done with the bare hands, and it was impossible to avoid danger from eczema and abrasions of the skin of the hands. It was neither appetizing nor sanitary. A good candy puller might pull three hundred pounds of candy a day. The capacity of the large machines now in use is two and one-half tons each, and one man can attend to two machines. Thus since 1900, the art has advanced from a production of 300 pounds a day to 10,000 pounds, with the same labor.

In April, 1900, Dickinson published an article in the trade journal, "The Confectioner," describing a machine for pulling candy and offering it for sale. He advertised it quite largely. Hildreth ordered the Dickinson machine, tested it and rejected it as unsatisfactory. One of Hildreth's men, Thibodeau, having seen and worked on the Dickinson machine, made a machine which worked better. Hildreth filed an application for a patent for one device for pulling candy September 21, 1900. Thibodeau filed an application for another November 26, 1900, and an interference was declared between them. Thibodeau thereafter bought Dickinson's invention and caused him to file an application for a patent November 5, 1901. Six applications were pending in the Patent Office at the same time, those of Dickinson, Hildreth, Jenner, Thibodeau, Robinson and Henry, and the Patent Office framed the issue between them in terms exactly those afterwards granted to Dickinson as the claim relied on in this case.

The controversy in the Patent Office lasted five years, was strenuously contested, and was carried to the Court of Appeals of the District of Columbia. The controversy involved, among other issues, that of the operativeness of Dickinson's device, as does the present case in one of its phases. He had given a public test of his machine at Grand Rapids where he lived, in 1900, and had invited a number of witnesses. They were called before the Examiner to testify whether the machine had worked successfully, and the Examiner found from the great weight of evidence that it had. Hildreth was a witness in the District Court below on this issue. He was in the embarrassing situation of having fought, in the Patent Office, Dickinson's claim, which he was now supporting as his property. He testified that while Dickinson's machine was not a success commercially, he had found that by shortening it and speeding it up, in accord with a suggestion of Dickinson, he could and did make satisfactory candy. The record shows that the judge in the District Court below had a working model before him which he refers to as demonstrating that the device is operative.

Hildreth has been a candy manufacturer of Boston for many years, and since 1906 has made candy machines. In addition to his own patent, he has acquired by purchase all the other patents in interference with Dickinson. He acquired the Dickinson patent from Thibodeau before its issue, for $75,000.

By these new devices the art of candy making has been revolutionized. Some kinds of candy which if pulled at all had to be pulled when cold, could not be pulled by hand, because it required more than man strength; but they are now pulled by power machines. The production of candy has greatly increased, and 90 per cent. of all the pulled candy made is pulled by machine. Hildreth makes a half dozen different classes of machines which embody the devices of his own patent and others which he has

purchased, but none of the model of Dickinson's. Mastoras, the respondent here, was for some time a licensee of Hildreth until he made and used his present machine.

In candy pulling by hand, the puller works the boiled candy, cooled but still warm and sticky, into a sausage-like piece two or three feet long, and weighing 20 or 25 pounds, called a batch. He throws the middle of this over a hook fixed in the wall about the level of his chin. He pulls down the two ends, stretching the batch two or three times its length. Then he holds the ends together with one hand and with the other seizes the two strands about their middle and carries them over the hook, thus making a new bight of the folded or lapped strands over the hook, and shortening the lengths hanging from the hook, the ends of which are now brought together and pulled down again. This operation repeated often, brings the candy into desired condition.

In the Dickinson machine, the candy is placed in the bottom of a trough, in the center of which is an upright pin, referred to in the patent as the "candy-puller." There are two other pins suspended over the trough from the ends of an arm or plate which in turn is fixed to a support and made to rotate. By suitable contrivance, the support which carries the pins is made to move back and forth from end to end of the trough. At each end of the trough, the pins are made by the rotary motion of the plate to which they are suspended, to reverse their positions from one side of the trough to the other before beginning their movement in the opposite direction. In this way there is produced an in-and-out movement of the suspended pins relative to the stationary pin every time they reach and depart from the ends of the trough. This movement causes the "batch" of the candy in the trough, attached itself to the movable pins, to be pulled by lapping on itself as the suspended pins pass and repass the fixed pin and as their positions are reversed. The change

of the relative position of the three pins is such that in a complete cycle of operation of the machine one of the pins passes through the space between the other two, and then another of the pins passes through a space between the other two, and then the third between the other two, each pin at one phase of the operation passing between two others, and at another phase of the operation being one of the pair between which the third one is passing. Just as the hand pulling of the candy produced a bundle of parallel fibers between which were formed air cells rendering the mass porous, so the mechanism of Dickinson's machine secures the same result. It elongates the candy, folds it upon itself, again elongates the folded mass, again folds it upon itself and repeats the operation in order. So far as this record discloses, no candy pulling has been successful which does not in some form by an arrangement of three or more pins show this in-and-out movement to pull and lap the candy, and no one had shown it prior to Dickinson.

Dickinson's claim here sued on is as follows:

"A candy-pulling machine comprising a plurality of oppositely-disposed candy hooks or supports, a candy-puller, and means for producing a specified relative in-and-out motion of these parts for the purpose set forth."

This, as already said, is the claim which was framed in the Patent Office as the issue of the interference proceeding, and of which Dickinson was given priority over all. The presumption of priority and novelty which arises from the granting of a patent must have greatly increased weight when the claim of the inventor is subjected to such close and careful scrutiny under the stimulus of a heated contest.

The Circuit Court of Appeals held the claim of Dickinson to be limited by a prior patent to Firchau for a candy working machine applied for in March, 1893, and issued

December 19, 1893. The machine shown in the Firchau patent comprises two discs which are rotated in opposite directions. On each disc is a finger which projects into a drum, into which the candy is put. The pins pass each other twice during each revolution of the disc and move in concentric circles, but do not have the relative in-and-out motion or figure 8 movement of the Dickinson machine. With only two hooks there could be no lapping of the candy, because there was no third pin to re-engage the candy while it was held between the other two pins. The movement of the two pins in concentric circles might stretch it somewhat and stir it, but it would not pull it in the sense of the art. The Firchau device never, so far as appears in the record, made candy experimentally or otherwise. Indeed, no candy was commercially pulled by machine before or after the issuing of the Firchau patent in 1893 until the introduction of the Dickinson principle, nine or ten years later.

Counsel for the respondent in seeking to narrow the construction of the broad claim of Dickinson rely on the circumstance that one of Dickinson's claims in the Patent Office was canceled on a reference to Firchau. The canceled claim of Dickinson was:

"In a candy-pulling machine in combination a series of pins or pulling members, and automatically acting means for causing said members to feed the candy to each other and pull the same."

The Examiner evidently considered that the word "series" might be held to cover a device with only two pins, as shown in the Firchau patent; though, having in mind the essential elements of the Dickinson patent, it could hardly have borne such a construction. However that may be, as neither Firchau nor anyone else has shown, with two pins only, the in-and-out movement in pulling candy, which is the fundamental element of the

Dickinson invention, the cancelation does not seem to us important or to require a narrowing of Dickinson's claim for the described and indispensable coöperation of three or more pins to produce that movement.

The Court of Appeals bases something of its conclusion in this case on the alleged inoperativeness of the Dickinson machine. As to this, we find no reason in the record for disturbing the finding of the District Judge, with the working model and the witnesses before him, supported as he is by the finding of the Patent Office and the District Court of Appeals on extended evidence on this very point before them. It is not necessary, in order to sustain a generic patent, to show that the device is a commercial success. The machine patented may be imperfect in its operation; but if it embodies the generic principle, and works, that is, if it actually and mechanically performs, though only in a crude way, the important function by which it makes the substantial change claimed for it in the art, it is enough. *Telephone Cases*, 126 U. S. 1, 535; *Mergenthaler Linotype Co.* v. *Press Publishing Co.*, 57 Fed. 502, 505.

The Patent Office treated the Dickinson invention as a primary or generic one. So did the Court of Appeals of the District of Columbia (25 App. D. C. 316), Judge Rose of the District Court of Maryland (*Hildreth* v. *Lauer & Suter Co.*, 208 Fed. 1005), and the Circuit Court of Appeals of the Fourth Circuit (*Lauter & Suter Co.* v. *Hildreth*, 219 Fed. 753). In this view, after a consideration of the record, and for the reasons stated, we concur. The history of the art shows that Dickinson took the important but long delayed and therefore not obvious step from the pulling of candy by two hands guided by a human mind and will to the performance of the same function by machine. The ultimate effect of this step with the mechanical or patentable improvements of his device was to make candy pulling more sanitary, to re-

duce its cost to one-tenth of what it had been before him, and to enlarge the field of the art. He was, therefore, a pioneer.

We come now to the question of infringement. In the Langer patent, applied for in 1916 and issued in 1917, which the alleged infringement embodies, there is a so-called "floating puller," which is carried through a course of travel corresponding in form to the figure 8, and around fixed supporting pins arranged concentrically within the two circular portions of figure 8. The candy is pulled by the floating puller and alternately carried thereby around the fixed supporting pins. Instead of having Dickinson's single stationary pin and two other pins which move relatively to it and to one another, the machine of the Langer patent has two stationary pins and a third one which moves relatively to both of them in an actual and rigid figure 8.

Taking the first claim of Dickinson's patent as it reads, one can trace every element of it in the Langer machine. We find there a plurality of oppositely-disposed candy hooks or supports. The candy-puller is found in the movable pin of Langer, and a relative in-and-out motion in the pulling process is palpably present.

Both Dickinson and Langer in their specifications characterize the path of the candy under the operation of the hooks as being along a course of travel corresponding in form to the figure 8. The Circuit Court of Appeals found, however, that the in-and-out movement of the Langer patent was different from the in-and-out movement of the Dickinson patent, in that it was a true figure 8 in the former, whereas in the Dickinson patent the candy follows a path of a series of V's and not a true figure 8 path at all. We differ from the Court of Appeals in this view. The actual movement of the candy in the Langer patent, even though the movable pin follows a fixed path of figure 8, forms a succession of V's closely resembling the V's

of the Dickinson patent, so that in each the path of the candy is better described as an in-and-out movement than as a figure 8. The arrangement of the hooks by Langer is better than Dickinson's, but the principle of their operation is the same.

The counsel for the respondent, however, urge that the trough, not shown in the alleged infringement, is a necessary element of Dickinson's claim, because without it the batch of candy could not be supported against gravity, and he suggests no alternative. Dickinson says in his specifications that he shows a trough for supporting the candy, but any suitable support may be used which has the capacity for supporting the candy while it is being operated upon. Two of the machines, the Jenner and the first Thibodeau, which were in interference in the Patent Office with Dickinson, had the pins set, not in an upright but in a horizontal position, and thus the candy in their machines needed no trough support but rested on the pins themselves, and this Langer has adopted. Doubtless this was an improvement which was perhaps patentable, but none of the tribunals in the Patent Office proceedings deemed this to be more than an improved equivalent of the trough which did not take these machines out of the domination of the claim awarded to Dickinson. As the Dickinson patent is a generic patent, the doctrine of broad equivalents properly applies here. *Morley Sewing Machine Co.* v. *Lancaster*, 129 U. S. 263, 273; *Miller* v. *Eagle Manufacturing Co.*, 151 U. S. 186, 207; *Paper Bag Patent Case*, 210 U. S. 405.

The Circuit Court of Appeals held that the issuing of the Langer patent, after the Dickinson patent, raised the presumption of a patentable difference between that patent and the Dickinson patent, and against infringement. It is not necessary for us, however, to discuss that question, for we think that whatever presumption against infringement may attach to the issuing of the second

27. Syllabus.

patent, if any, the evidence here is quite sufficient to overcome it.

The decree of the Circuit Court of Appeals is reversed, and that of the District Court is affirmed.